In the Claims:

Please amend the claims as follows:

1-25 (cancelled)

26. (currently amended) The method according to claim $25 \underline{52}$, wherein one or more jets
of the at least one oxidant gas are directed to the gas flow.
27. (cancelled)
28. (previously amended) The method according to claim 26, wherein said one or more
jets of the at least one oxidant gas are colder than said gas flow.
29. (cancelled)
30. (currently amended) The method according to claim $\frac{29}{52}$, wherein the gas flow is
directed through a de Laval nozzle.
31. (cancelled)
32. (currently amended) The method according to claim $\frac{23}{52}$, wherein the the base
material said first reactant comprises silicon tetrachloride, germanium tetrachloride, or

tetraethylortosilicate, or tetraethoxygermanium.

- (currently amended) The method according to claim 23 52, wherein said dopant eomprises erbium, neodymium, or other rare earth metal is erbium or neodymium.
- 34. (currently amended) The method according to claim 23 52, wherein the particles are formed in a reactor at a temperature between approximately said oxidation takes place at temperatures in a range of 1000 and to 2000°C.
- 35. (currently amended) The method according to claim 23 52, wherein the dopant emprises said particles further comprise aluminium, phosphorus, borium boron and/or fluorine.
- (currently amended) The method according to claim 25 26, wherein said one or more jets of the at least one oxidant gas comprise jets formed of oxygen and/or carbon dioxide.
- (currently amended) The method according to claim 25 52, wherein the dopant emprises said second reactant is in a liquid solution prior to said heating.
 - 38-51 (cancelled)
- 52. (new) A method for the preparation of doped oxide material from a first reactant and a second reactant, said first reactant comprising silicon, and the second reactant comprising a rare earth metal, the method comprising:

bringing said first reactant and said second reactant into a gas phase by heating said first reactant and said second reactant,

mixing said first reactant and said second reactant together to create a gas flow, and mixing said gas flow with at least one oxidant gas to form particles by oxidizing silicon and said rare earth metal, and by condensing oxide vapors formed by said oxidizing, so that said oxide vapors reach a supersaturated state substantially simultaneously, wherein said particles are formed such that there is no time to reach a chemical phase equilibrium, and all substances present in said gas flow are substantially in the gas phase prior to said oxidizing.

- 53. (new) The method according to claim 26, wherein said one or more jets of the at least one oxidant gas are transverse with respect to said gas flow.
- 53. (new) The method according to claim 30, wherein one or more jets of the at least one oxidant gas are directed to the gas flow in a narrowest part of the de Laval nozzle.
- 54. (new) A method for the preparation of doped oxide material from a first reactant and a second reactant, said first reactant comprising germanium, and the second reactant comprising a rare earth metal, the method comprising:

bringing said reactants into a gas phase by heating said reactants,

mixing said reactants together to create a gas flow, and

mixing said gas flow with at least one oxidant gas to form particles by oxidizing germanium and said rare earth metal, and by condensing oxide vapors formed by said oxidizing, so that said oxide vapors reach a supersaturated state substantially simultaneously, wherein said

particles are formed such that there is no time to reach a chemical phase equilibrium, and all substances present in said gas flow are substantially in the gas phase prior to said oxidizing.

55. (new) The method according to claim 54, wherein said first reactant comprises germanium tetrachloride or tetraethoxygermanium.